**Unit 4 Map (Biochemistry)**

Ms. OK, AP Biology, 2014-2015

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| **Topic** | **Learning Target** | **DBA Score** (%) | **Test Score** (%) |
| 1. Atomic and Molecular Structure | A. I can describe the basic properties of atoms and the subatomic particles within them. |  |  |
| B. I can describe the interactions within molecules (ex: ionic and covalent bonds) that allow them to form molecules. |
| C. I can describe the interactions between molecules (ex: hydrogen bonds). |
| 2. Properties of Water | D. I can explain how the interactions between hydrogen and oxygen make water a polar molecule. |  |  |
| E. I can connect the polarity of water to its ability to act as a solvent. |
| F. I can connect polarity of water to its ability to hydrogen bond. |
| G. I can connect the ability of water to hydrogen bond to its resulting properties – cohesion (and surface tension), adhesion, capillary action, high specific heat / heat capacity, and low density as a solid. |
| 3. Macromolecules | H. I can explain why carbon is an important component of the four macromolecules—carbohydrates, lipids, proteins, and nucleic acids. |  |  |
| I. I can identify images and examples of monomers and polymers for the four macromolecules. |
| J. I can connect the structures of the macromolecules to their functions. |